

CALIFORNIA'S HEALTH

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Poliomyelitis in California Comparative Incidence 1948-1951

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WM. ALLEN LONGSHORE, JR., M.D., M.P.H., Acting Chief, Bureau of Acute Communicable Diseases

Since the epidemic of poliomyelitis in 1948-49 the reported incidence of this disease has remained relatively higher than expected, based on records for past years in this State.

Detailed tabulations of the epidemic of 1948-49 and the following year 1949-50 have been presented previously.¹ The purpose of this paper is first to summarize the reported morbidity and mortality data for the two disease years (April-March) 1950-51 and 1951-52 (preliminary figures are used for the latter year), and secondly, to review the entire four years' experience (April, 1948-March, 1952).

METHOD OF STUDY

In order to clarify and supplement data received on the original morbidity report card, the State Department of Public Health has for some years asked for the completion of supplemental history forms on reported cases by the local health departments. The form used provides for information on the type and location of paralysis or weakness, residual effects 14 days after onset and/or death.

Other records used to check against morbidity reports are death certificates and laboratory reports. Cases not previously reported, found by matching cards and death certificates, are entered and the local health officer is notified. Since at present there is no routine laboratory test for the diagnosis of poliomyelitis, the laboratory reports serve to establish or rule

out one of the differential diagnoses, such as mumps, encephalitis or the arthropod-borne encephalitides, which clinically are difficult to distinguish from non-paralytic poliomyelitis. After correspondence with the local health officer, corrections are made on the basis of laboratory test results.

The data then include all cases reported, plus deaths (not reported prior to death), minus cases deducted because of change in final diagnosis (from histories or laboratory reports).

Trend of Reported Poliomyelitis by "Disease Years" April-March, 1941-1951

"Disease Years" April-March	Reported cases	"Disease Years" April-March	Reported cases
1941-42	237	1947-48	735
1942-43	365	1948-49	6,070
1943-44	2,655	1949-50	2,623
1944-45	428	1950-51	2,313
1945-46	950	1951-52	3,198
1946-47	2,239		

The six-year total 1941-46 was 6,874 reported cases; in the subsequent five years there have been 14,939 cases reported or an increase of 117 percent. Several factors may be reflected in this increase. These include first the population increase by births and/or migration; second an increase in completeness of reporting; third an increased awareness of the disease, bringing more mild and nonparalytic cases to diagnosis.

When these factors are examined, we find that between 1940 and 1950 the population of California increased from 6,982,000 to 10,586,000 or 53 percent.

Births to California residents in the years 1941-46 totaled 815,411, increasing in the years 1946-50 to

¹ California's Health, Vol. 7, No. 7, October 15, 1949.
² Ibid., Vol. 7, No. 23, June 15, 1950.

Counties With Rates of 3 or More per 10,000 Population



1948-49



1949-50



1950-51



1951-52

3.0-3.9 4.0 & over / 10,000

1,189,910. The percent increase between the two five-year periods was 46 percent.

In summary: The population has increased by 53 percent, births to residents of the State by 46 percent, but reported poliomyelitis has increased 117 percent, even when the periods compared are six years (1941-46) against the five years (1947-51).

EPIDEMIOLOGY

Descriptive factors used in the epidemiology of reported poliomyelitis cases are: geographic distribution, age, sex, seasonal distribution, percent of cases showing weakness or paralysis, and/or death. Fatality and bulbar involvement in paralytic cases are both measures of the severity of the disease.

Geographic Distribution

During the four "disease years," 1948-1952, poliomyelitis was widespread throughout the State. The distribution of population in the 58 counties of the State is most uneven. Four counties contained 59 percent of the State's 10,600,000 people in 1950—Los Angeles 39.2 percent, San Francisco 7.3 percent, Alameda 7.0 percent and San Diego 5.3 percent. Of the remaining 41 percent of the population, 20 percent is further concentrated in eight counties. This means that we have 46 counties which together have only 21 percent of the State's population residing in them.

With the excellent system of state highways, the people of California travel long distances and think little of it. Many of the sparsely populated counties are important resort areas so that at certain seasons their nonresident population exceeds the resident. This mobility of our population brings remote areas into contact with urban and suburban populations at almost any season of the year.

Where people go human diseases may go with them and poliomyelitis has been diagnosed and reported in

all but one county of the State in the past four years. See four maps showing counties of high incidence.

In 1948-49 the high incidence rates were in the southern half of the State and the San Francisco Bay area.

In 1949-50 there were only a few counties having rates above 3/10,000 population.

In 1950-51 three counties had rates above 4/10,000 and five between 3 and 3.9/10,000.

In 1951-52 we had a number of counties, mostly northern, with rates of over 4/10,000 and six with rates between 3 and 3.9.

Cases of POLIOMYELITIS
By Month of Onset 1948-'51
(“DISEASE YEARS”)

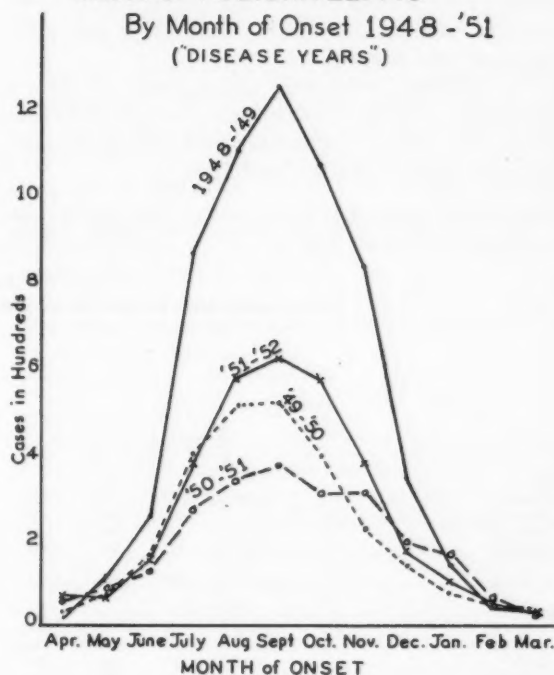


Table 1
Reported Cases by Month of Onset—"Disease" Years 1948-1951

Disease years April-March	Total* with known onset	April	May	June	July	August	September	October	November	December	January	February	March	Unknown
1948-49	6,077	20	118	256	868	1,098	1,249	1,069	830	343	146	48	42	
1949-50	2,629	29	71	166	400	510	519	392	228	143	80	47	44	6
1950-51	2,311	55	81	123	270	333	373	306	309	191	168	65	37	
1951-52	3,169	57	68	159	380	578	616	570	372	179	101	63	26	4

Percent by Month of Onset

	100%													
1948-49	6,077	0.3	1.9	4.2	14.3	18.1	20.5	17.5	13.6	5.7	2.4	0.8	0.7	
1949-50	2,629	1.1	2.7	6.3	15.2	19.4	19.7	14.9	8.7	5.4	3.1	1.8	1.7	
1950-51	2,311	2.3	3.5	5.4	11.6	14.4	16.2	13.2	13.4	8.3	7.2	2.8	1.7	
1951-52	3,168	1.7	2.2	5.0	12.0	18.2	19.5	18.0	11.7	5.6	3.2	2.0	0.9	

* Totals are those with onset within the particular disease year.

Assuming that a rate of over 3/10,000 is epidemic,² the State experienced an epidemic rate in two of the past four years. State rates were:

1948-49.....	5.8/10,000	1950-51.....	2.2
1949-50.....	2.5	1951-52.....	3.0

With the exception of 1948-49 only a few counties had high rates in any one year, hence the level of reported cases must have been generally high to maintain the state rate at the figure observed. This was found to be so, particularly in the population centers of the State.

Seasonal Distribution

Figures are given for state totals by month of onset of illness. There were variations from this state pattern from county to county but no definite pattern of movement in time from north to south or in any other direction was observed.

The reported cases were concentrated in the six months between July and December in each of the four years. Practically no differences were observed in cases reported between January and June.

² Gilliam, A. G., Hemphill, F. M., and Gerende, J. H.: Poliomyelitis Incidence and Epidemic Recurrence, Public Health Reports, Vol. 64, No. 49, December, 1949.

If this is the case, prediction of an epidemic on the basis of reported incidence between January and June would be extremely hazardous. However, when the incidence in July is three times that of June an epidemic appears likely. In Table 1 this was seen to occur only once in the four years in the epidemic of 1948-49.

California has had reported cases of poliomyelitis in every month of the year for the past four years, the lowest month in the entire period being April, 1948, the year of the most extensive epidemic the State has experienced to date.

Age and Sex Distribution

In the series of cases studied there were 19 with age not stated and 6 children under the age of 10 years with sex not stated and given names which did not indicate the sex of the child. The age and sex distribution and percentage distribution are presented in Table 2.

The cases during the four-year period show an over-all sex difference, 54.2 percent male to 45.8 percent female. This ratio does not persist for separate

Table 2
Poliomyelitis Cases by Age Groups and Sex, California—"Disease" Years 1948-1951

Year	Total all ages	Age groups											
		Under 1 year	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45 and over	Not stated
Total:													
1948-49.....	6,070	167	1,771	1,666	713	396	403	454	271	158	33	35	3
1949-50.....	2,623	55	649	690	328	196	208	239	124	76	34	17	7
1950-51.....	2,313	60	565	570	293	167	186	211	143	67	23	22	6
1951-52.....	3,198	82	737	860	386	208	227	338	193	103	34	27	3
4-year total.....	*14,204	364	3,722	3,786	1,720	967	1,024	1,242	731	404	124	101	19
Male:													
1948-49.....	3,322	88	1,035	1,045	396	209	149	187	109	70	15	18	1
1949-50.....	1,439	33	371	421	184	109	89	99	58	43	18	11	3
1950-51.....	1,253	35	330	366	164	79	68	87	64	27	15	13	5
1951-52.....	1,688	49	421	555	202	92	73	125	82	57	14	16	2
4-year total.....	7,702	205	2,157	2,387	946	489	379	498	313	197	62	58	11
Female:													
1948-49.....	2,746	79	736	619	317	187	254	267	162	88	18	17	2
1949-50.....	1,180	22	275	268	144	87	119	140	66	33	16	6	4
1950-51.....	1,060	25	235	204	129	88	118	124	79	40	8	9	1
1951-52.....	1,510	33	316	305	184	116	154	213	111	46	20	11	1
4-year total.....	6,496	159	1,562	1,396	774	478	645	744	418	207	62	43	8

* Total includes six cases with sex not stated.

age groups. The percentage of cases decreases as age increases for males, while for females the reverse is observed. This shift is not apparent after age 35 years.

Percent by Sex in Selected Age Groups

	All ages		Under 10		10-14	
	No.	%	No.	%	No.	%
Total.....	14,204	100.0	7,872	100.0	1,720	100.0
Male.....	7,702	54.2	4,749	60.3	946	54.9
Female.....	6,496	45.8	3,123	39.7	774	45.1

	15-34		35 and over	
	No.	%	No.	%
Total.....	3,964	100.0	629	100.0
Male.....	1,679	42.4	317	50.4
Female.....	2,285	57.6	312	49.6

The percent of total cases under the age of one year is low and approximately the same for both sexes. In the age group 1-14 males exceed females, while in the group 15-34 the reverse is observed.

Percent by Age Groups by Sex

Age groups	Total	Male	Female
All ages	14,204 100.0	7,702 100.0	6,496 100.0
Under 1	364 2.5	205 2.6	159 2.4
1-9	7,508 52.9	4,544 59.0	2,958 45.5
10-14	1,720 12.1	946 12.3	774 12.0
15-34	3,964 27.9	1,079 21.8	2,285 35.1
35 and over	629 4.4	317 4.1	312 4.8
Not stated	19 0.2	11 0.2	8 0.2

When distribution for single years are examined it is found that the above relationships are much the same in each year with some fluctuation in actual percents from year to year. There are only two age groups in which changes in percent move consistently in one direction over the four-year period. These are age groups 1-4 and 25-29.

Years	Ages 1-4			Ages 25-29		
	Total	Male	Female	Total	Male	Female
1948-49	29.2	31.1	26.8	7.5	5.6	9.7
1949-50	24.8	25.8	23.3	9.1	6.9	11.9
1950-51	24.5	26.4	22.2	9.2	7.0	11.7
1951-52	23.1	25.0	20.9	10.6	7.4	14.1
4-year total	26.2	28.0	24.0	8.7	6.4	11.5

The one exception in consistent change (males 1950-51) is not significantly different from the preceding year. All changes between 1948-49 and 1951-52, ages 1-4, were tested and found to be statistically significant.

For the age group 25-29 the differences 1948-49 to 1951-52 were significant for the total cases and the female cases but not the male.

This decrease in the proportion of cases in the 1-4 age group is hard to reconcile with the very high birth rates during the past six years. Equally difficult to explain is the significant increase in proportion of female cases 25-29 years of age.

The differences exist and are statistically significant. A special study yielding far more information than is available from current state records would be needed to attempt to explain them.

In order to discover whether the age-sex fluctuations observed were simply reflections of the distribution of the population by age and sex, poliomyelitis and population were compared.

Age groups	Male		Female	
	Population 1950 Census	Poliomyelitis 4 Years	Population 1950 Census	Poliomyelitis 4 Years
5	10.9	30.6	10.0	26.4
5-9	8.2	31.1	7.6	21.5
10-14	6.4	12.3	6.1	12.0
15-24	13.4	11.3	13.7	17.2
25-34	17.1	10.5	16.6	17.9
35-44	15.2	3.4	15.7	4.2
45 and over	28.9	0.7	30.2	0.6

These figures show no such sex differences in population groups as are observed in the reported cases of poliomyelitis. There are no large differences in population by age groups and sex.

Paralytic Type and Fatality

Reported Cases of Poliomyelitis by Paralytic Type and Fatality, 1948-1951

Years	Total reported	Status known	Non-paralytic known	% of known	Total paralytic ¹
1948-49	6,070	6,039	1,631	27.0	4,408
1949-50	2,623	2,498	789	31.6	1,709
1950-51	2,313	2,303	684	29.8	1,619
1951-52	3,198	3,075	915	29.8	2,160
4-year total	14,204	13,915	4,019	28.9	9,896

Years	% of known	Bulbar ²	% of P. ³	Died	% of P.
1948-49	73.0	1,129	25.6	388	8.8
1949-50	68.4	451	26.4	111	6.5
1950-51	70.2	448	27.6	106	6.5
1951-52	70.2	599	27.7	143	6.6
4-year total	71.1	2,627	26.5	748	7.5

¹ Paralytic cases are those having definite muscular weakness of specific muscle groups which persists for more than two examinations at least a few hours apart.

² Bulbar cases include bulbo-spinal.

³ Fatality and percent bulbar are based on total paralytic cases.

The percent of total cases reported showing some weakness or paralysis during the course of illness did not vary significantly from year to year during the four years studied. The lowest percent observed with paralysis or weakness was 68.4 in 1949-50, and the highest was 73.0 in 1948-49. This difference is statistically significant. The fatality based on deaths of paralytic cases was significantly higher in 1948-49 than any of the three years following. There was no significant difference in the percent of total paralytic cases showing bulbar involvement.

SUMMARY

During the past four years the reported incidence of poliomyelitis in California has remained at a high level when compared to previous years, records for the State. Only one of the four years could be classed as an epidemic (state-wide) though epidemic rates were observed in some counties each year.

The pattern of the disease as to age, sex, and seasonal distribution was amazingly constant.

Fallacies concealed in the data because of errors in diagnosis and/or classification of the case by paralytic status cannot be measured from records available to us.

The reasons for the rise in endemic level of reported poliomyelitis are not obvious from any of the data analyzed. Whether we have more poliomyelitis or just more reported cases of poliomyelitis cannot be stated with certainty.

Pasadena Nursing Position

The City of Pasadena has a vacancy for a public health nurse. Salary range is \$290-\$348. Candidates should possess a valid certificate as a public health nurse in California. Further information is available from the Personnel Department, Room 200, City Hall, Pasadena.

Mental Health Week—May 4-10

ELIZABETH LEWTON, Mental Health Consultant, State Department of Public Health

Mental Health Week, May 4th to May 10th, reminds us to take stock of developments during the past year. Again, communities throughout the State and Nation are observing this week with special programs designed to inform their citizens of the importance of the mental health approach and the progress which has been made. The Mental Health Society of Northern California and the Southern California Society for Mental Hygiene have encouraged their member chapters to develop such programs. Mental health materials have been provided for use in planning special observances. Many libraries are displaying books and pamphlets on mental health and related subjects.

The State Department of Mental Hygiene is participating by holding open house in the various state mental hospitals and homes for mental defectives. Any interested person is invited to come and see what the last three years of hard and devoted work has done to improve the quality of service in our state institutions. Visiting hours can be determined by calling the institution.

On July 1, 1951, the California State Mental Health Authority was transferred from the Department of Public Health to the Department of Mental Hygiene. Governor Warren took this action on the recommendation of both departments; they were in agreement that the resources of the Department of Mental Hygiene should be actively used in a preventive as well as a treatment program. Dr. Portia Bell Hume was ap-

pointed by Dr. Frank Tallman, Director of Mental Health, as Deputy Director of Community Services and, under her guidance, there has been an increasing effort to make outpatient services available to local communities.

This has led to one plan by which our Mental Health Service in the Department of Public Health is working in close collaboration with a traveling clinical team from the Department of Mental Hygiene to offer psychiatric service and follow-up to two northern counties. In addition, the Mental Health Service, State Department of Public Health, has continued its consultation with the staff of state and local agencies to enable them to deal more effectively with the many emotional and mental health aspects of their work. This service has been offered not only to the state and local health departments but to juvenile halls, school systems, welfare departments, a tuberculosis sanatorium, and others. We find an increasing awareness among all staffs of the importance of emotional factors to the success or failure of their work. In addition, it is becoming ever more clear that no individual and no agency can pursue these objectives alone. We are "everyone, members one of another," frequently serving the same people, and time spent in coordination and joint planning will not only benefit the individual family but will mean a more satisfying and enriching experience for the staff as well.

Hospital, Health Center Construction Applications Due May 31

Hospitals and health departments which desire consideration for an allocation of federal funds which may be made available for the 1952 Fiscal Year for hospital and health center construction must submit applications prior to May 31st to the California State Department of Public Health, attention Bureau of Hospitals, 760 Market Street, Room 360, San Francisco 2. The bureau is available for discussion with local organizations and to assist in the preparation of the applications. Application forms are available from the bureau.

Voluntary nonprofit organizations and public agencies authorized to construct and operate facilities are eligible to apply for federal grant. In addition, public agencies which are approved and receive federal assistance are eligible for assistance from state funds in an

amount equal to the federal grant. Assistance to voluntary nonprofit hospitals is limited to a maximum of one-third federal funds. Public institutions may obtain a maximum of one-third federal funds and one-third of state funds. Allocations are made on a priority basis, by approval of the Hospital Advisory Council and the State Department of Public Health.

A total of 55 projects have been approved for allocation of federal funds since 1947. State funds have been granted to 36 of these projects. A total of 2,980 hospital beds have been placed in operation, or are planned, and 10 public health center facilities will be provided upon completion of the approved projects.

Since 1947 approximately \$15,000,000 in federal funds have been allocated to projects in California, and about \$9,000,000 in state funds have been granted to supplement the federal allocations. California receives approximately \$3,000,000 annually in federal appropriations.

Fred R. Ingram Takes University Post

Fred R. Ingram, Chief Engineer and Assistant Chief, Bureau of Adult Health, has resigned from the state health department staff to accept a position as the engineer administrator of the University of California's newly created Division of Occupational Health with the title of chief industrial health safety engineer. This division will be responsible for the on-the-job health of employees on all campuses. Eventually the staff will include, in addition to Mr. Ingram, a physician at the Berkeley headquarters and a chemist and an engineer at Berkeley and U. C. L. A. to service campuses in the respective areas.

The need for health services to university employees was pointed up in studies made by the Bureau of Adult Health at the request of the university. Administratively, the new Division of Occupational Health will be under the direction of Dr. William G. Donald, who also directs the University Student Health Service and Cowell Hospital.

Mr. Ingram joined the state staff in 1937, when the Bureau of Adult Health, then the Industrial Hygiene Service, was created and has been with the bureau since, except for four years from 1943 to 1947 which he spent as chief of the Division of Industrial Hygiene at the University of Colorado.

Health Officer Changes

Paul L. Murphy, M.D., has been appointed acting health officer for Kings County. Donald E. Upp, M.D., former health officer, was recalled to active military duty.

Wenonah Thom, M.D., is the acting health officer for Butte County. John R. Philp, M.D., former health officer, resigned to become assistant chief of the Division of Local Health Services, State Department of Public Health.

Dr. Breslow Appointed as Consultant to President's Health Commission

Dr. Lester Breslow, Chief of the Bureau of Chronic Diseases, has been granted a leave of absence to serve as a consultant to the President's Commission on Health Needs of the Nation. Duration of the assignment is indefinite, but it is known that the commission's report to the President is scheduled for completion by the end of 1952. Dr. Breslow is presently working with two other physicians to devise and initiate a study program to estimate health needs.

Other Californians who will serve with the President's commission are Russell V. Lee, M.D., of Palo Alto, and Ernest G. Sloman, M.D., of San Francisco.

It is contemplated that 20 or more panels consisting of leading experts in each field of study will be set up.

The executive order creating the commission lists the following eight areas of study:

1. The current and prospective supply of physicians, dentists, nurses, hospital administrators, and allied professional workers; the adequacy of this supply in terms of the present demands for service; and the ability of educational institutions and other training facilities to provide such additional trained persons as may be required to meet prospective requirements.
2. The present ability of local public health units to meet demands imposed by civil defense requirements and by the needs of the general public during this mobilization period.
3. The problems created by the shift of thousands of workers to defense-production areas requiring the relocation of doctors and other professional personnel and the establishment of additional facilities to meet health needs.
4. The degree to which existing and planned medical facilities, such as hospitals and clinics, meet present and prospective needs for such facilities.
5. Current research activities in the field of health and the programs needed to keep pace with new developments.
6. The effect upon the continued maintenance of a desirable standard of civilian health of the actions taken to meet the long range requirements of military, civil-defense, veterans and other public-service programs for medical personnel and facilities.
7. The adequacy of private and public programs designed to provide methods of financing medical care.
8. The extent of federal, state, and local government services in the health field, and the desirable level of expenditures for such purposes taking into consideration other financial obligations of government and the expenditures for health purposes from private sources.

Mendocino Nursing Position

A position is open for a qualified public health nurse in the newly organized Mendocino County Department of Public Health. The district consists of all of the coastal area of the county, and the nurse is required to live in or near Fort Bragg. The salary is \$300 per month, and in addition \$100 flat rate per month is allowed for automobile expenses. For further information write Miss Margaret Bernard, Director of Public Health Nursing, 880 North Bush Street, Ukiah, California.

San Joaquin Local Health District

The San Joaquin Local Health District now has vacancies for the following positions:

Medical officer	Salary \$555-\$700
Medical officer with public health training	Salary \$660-\$830
Health educator.....	Salary \$335-\$420
Public health analyst.....	Salary to be established

Further information may be obtained by writing directly to Dr. E. M. Bingham, District Health Officer, 130 South American Street, Stockton.

While science is prolonging the lives of human beings, prolonging physical life is relatively unimportant unless it also leads to happiness.—*Oren Root, President, National Association for Mental Health.*

Study of Diatomaceous Earth to Be Intensified

Continuation of studies in the control of potential health hazards in the quarrying, processing and use of diatomaceous earth was agreed upon at a recent meeting of State Department of Public Health staff and representatives of industry, held in the Berkeley offices of the Bureau of Adult Health.

Consensus of the discussion was that much has already been learned about how to protect the health of workers in this expanding California industry, but that gaps in knowledge still exist. Practical measures have been taken to control many sources of exposure of workers, and further action of this kind will continue in cooperation with the department and other official agencies. A study of the long-term effects on health of diatomaceous earth must necessarily extend over a period of years. The Berkeley meeting, one of a series, planned further collaborative effort both in study and control action.

The Bureau of Adult Health has taken leadership in the public health attack on problems of the diatomaceous earth industry. Despite the fact that this material has been mined and processed for at least 50 years, there is extremely little information available about the causes and control of pneumoconiosis, the lung disease which has become associated with this industry.

The Bureau of Adult Health has proposed a preliminary but thoroughgoing investigation in this field, to take the shape outlined below:

- I. Economic aspects
 - Sketch economic value of the industry, both production and consumption figures
 - Number and size of producing and processing plants
 - Number of workers
 - Location of industries
 - History of industry
- II. Geology
 - Location of deposits
 - Geological origin, etc.
- III. Chemistry and physics
 - Amorphous and crystalline forms
 - Relationships with other silica-containing materials (quartz, tripoli, tridymite, etc.)
 - Methods of analysis
- IV. Industrial uses and detailed description of processes and sources of exposure
 - Mining
 - Milling
 - Various applications and uses
- V. Clinical aspects
 - Description of diseases caused, both animal and human.
 - Relationship to tuberculosis
 - Relationship to classical silicosis, Shaver's disease, etc.
 - Diagnosis, management

- VI. Epidemiology
 - Statistics on incidence, by industry, occupation and other factors

- VII. Prevention
 - Engineering
 - Medical

Procedure

1. Review literature
2. Field studies
 - Plant studies
 - Engineering } combined
 - Medical } (Histories, physical examinations, chest films and other indicated procedures)
 - Correlation of clinical data with dust exposure, length of employment, occupation, etc.
 - Medical records
 - Hospitals, tuberculosis sanatoria, Industrial Accident Commission, industries, death records, etc.
 - Social security numbers of former employees will be obtained and traced
3. Communication with various sources of information:
 - State Division of Mines
 - European scientific workers
 - U. S. P. H. S.
 - U. S. Department of Labor
 - Other states
 - Other countries

This study would be conducted by the State Health Department and possibly other governmental agencies, with the cooperation of the industry.

REVIEW OF REPORTED COMMUNICABLE DISEASE MORBIDITY—MARCH, 1952

Diseases With Incidence Exceeding the Five-year Median

Diseases	March, 1952	March, 1951	March, 1950	5-year median
Chickenpox	7,993	4,884	6,046	6,046
German measles	1,398	616	332	608
Influenza	546	2,365	80	229
Meningitis (meningococcic)	41	34	44	36
Poliomyelitis	54	39	48	44
Salmonella infections	43	10	9	1
Shigella infections	34	20	31	23
Streptococcal infections, respiratory, including				
Scarlet Fever	1,037	861	822	714

Diseases Below the Five-year Median

Diseases	March, 1952	March, 1951	March, 1950	5-year median
Amebiasis	23	37	63	28
Brucellosis	4	8	14	11
Coccidioidomycosis	5	7	11	9
Diphtheria	7	13	39	53
Encephalitis, infectious	3	4	7	4
Food poisoning	15	7	725	16
Hepatitis, infectious	35	39	41	39
Measles	5,109	9,471	1,850	9,471
Mumps	3,432	1,707	6,444	4,191
Pertussis	378	185	851	507
Rabies, animal	4	8	6	24
Typhoid Fever	4	5	8	8

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